



# **FINAL SUPPORT SAMPLING PLAN**

## **ADDENDUM NO. 3**

**ASSOCIATED WITH PHASE II OF THE  
RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM**

*for the*

**ENGINEERING EVALUATION AND COST ANALYSIS  
OF THE FORMER CELOTEX SITE  
2800 South Sacramento Avenue  
Chicago, Illinois 60623**

*Prepared for:*

**ALLIEDSIGNAL, INC.  
MORRISTOWN, NEW JERSEY  
and**

**THE CELOTEX CORPORATION  
TAMPA, FLORIDA**

**NOVEMBER 1997**

*Prepared by:*

**PARSONS ENGINEERING SCIENCE, INC.  
1000 JORIE BOULEVARD, SUITE 250  
OAK BROOK, ILLINOIS 60523**

# **FINAL SUPPORT SAMPLING PLAN**

## **ADDENDUM NO. 3**

### **PART I - QUALITY ASSURANCE PROJECT PLAN**

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*for the*

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1000 JORIE BOULEVARD, SUITE 250  
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## **PART I - SECTION 1 INTRODUCTION**

### **1.1 GENERAL**

This Addendum No. 3 to the Final Support Sampling Plan (SSP) for the Engineering Evaluation and Cost Analysis (EE/CA) of the Former Celotex Site (the Site) located at 2800 South Sacramento Avenue in Chicago, Illinois, has been prepared by Parsons Engineering Science, Inc. (Parsons ES) to facilitate the implementation of the Phase II Residential Area Sampling and Analysis Program (RASAP). Parsons ES was retained by AlliedSignal, Inc. (AlliedSignal) to execute the EE/CA for the Site on behalf of the Site Respondents, AlliedSignal and The Celotex Corporation.

The work associated with the EE/CA is being performed in accordance with the Administrative Order by Consent (AOC) entered into between the Respondents and the United States Environmental Protection Agency (USEPA), Region V, on 1 November 1996. The AOC required that the residential assessment process initiated by the Respondents prior to the AOC be continued as part of the EE/CA, and specified that the extent of residential area removal actions (if required) be addressed and delineated.

### **1.2 PLAN OVERVIEW**

The conceptual approach to the Phase II RASAP was presented by the Respondents to the USEPA Region V for review and comment in a report entitled "*Residential Area Conceptual Work Plan (RACWP)*, 23 May 1997". In a letter dated 8 October 1997 from USEPA Region V remedial project manager (RPM), Mr. Thomas Williams, approval was provided by the Agency for the Respondents to proceed with the implementation of the conceptual approach outlined in the RACWP. The activities that will be performed as part of the Phase II RASAP are based on the conceptual approach discussed in the RACWP.

The Final SSP (dated March 1997) prepared by Parsons ES was designed to support the field investigation and sampling and analysis program for the main site, executed over the period of April through June 1997. The sampling and analysis program that will be executed for the Phase II RASAP will incorporate many of the quality assurance and quality control (QA/QC) requirements specified in Part I of the Final SSP (and Addendum No. 1) referred to as the Quality Assurance Project Plan (QAPP). In addition, the same analytical laboratory (Quanterra, Inc.) will be performing all chemical constituent laboratory analyses required for the Phase II RASAP. Many of the requirements that were discussed in Part II of the Final SSP, referred to as the Field Sampling Plan (FSP), will also apply to the Phase II RASAP. As such, this RASAP is being presented as Addendum No. 3 to the Final SSP.

Addendum No. 3 is subdivided into Part I - QAPP and Part II - FSP. Addendum No. 3, Part I identifies which requirements of the original Final SSP, Part I (QAPP) are applicable to the Phase II RASAP and which requirements will not apply. Addendum No. 3, Part II provides the sampling approach that will be utilized during the Phase II RASAP, and specifies which portions of the Final SSP, Part II (FSP) are applicable to the Phase II RASAP.

## **PART I - SECTION 2**

### **QUALITY ASSURANCE PROJECT PLAN DISCUSSION**

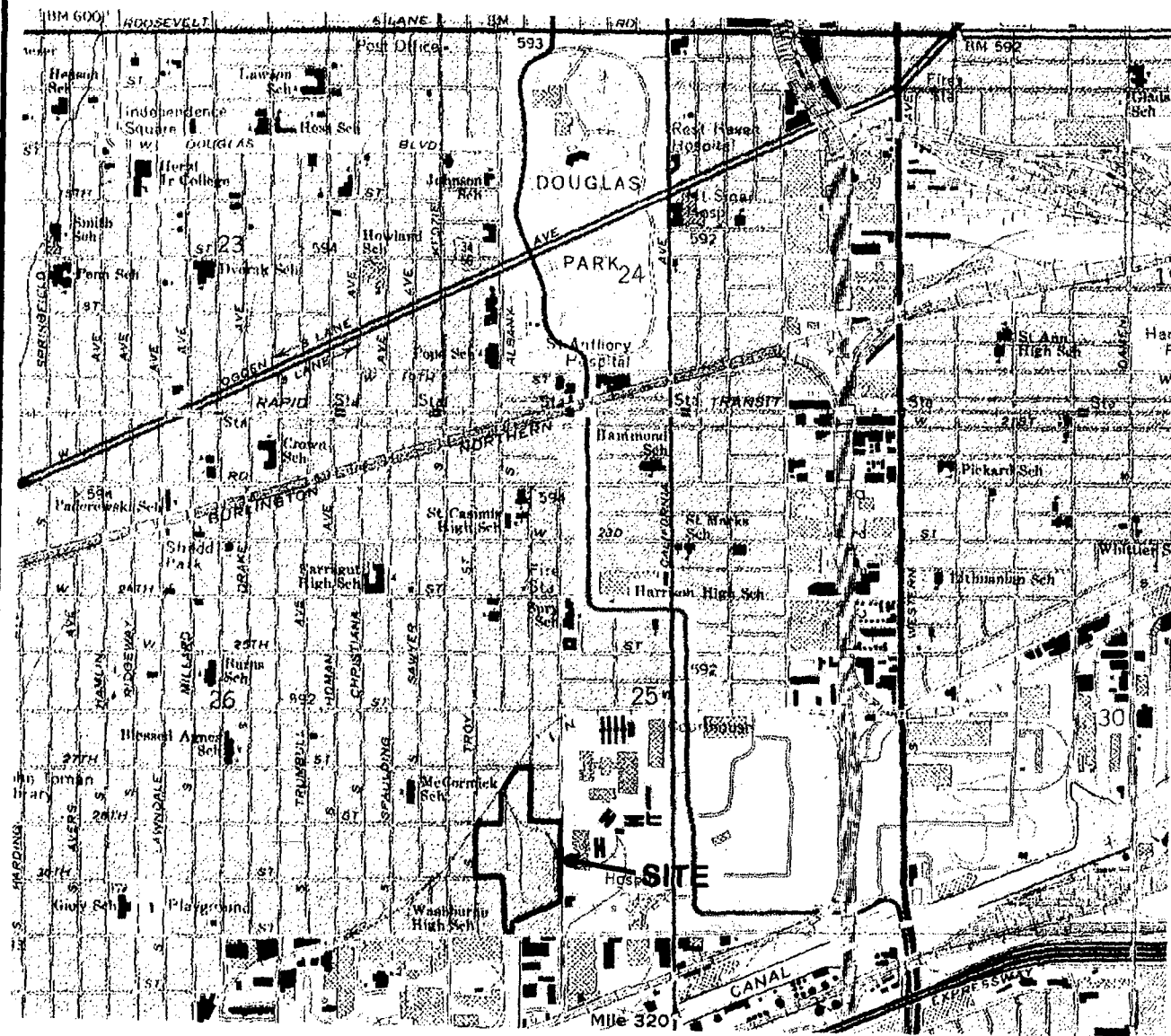
#### **2.1 OVERVIEW**

This section represents Addendum No. 3 to Part I of the Final SSP, the QAPP. It presents discussion on the applicability of the Final SSP QAPP to the Phase II RASAP. The Phase II RASAP will consist primarily of the sampling of surface soils located within the front and/or back yards of residential properties situated in the northeast sector (Sector 1) from the Site, within approximately 765 feet of the estimated center of the Site. Figure 2.1 shows the location of the Site and Figure 2.2 shows the manner in which the community area surrounding the Site has been subdivided into eight sectors. The northeast sector is shown as Sector No. 1. The following subsections discuss QAPP issues related to the Phase II RASAP.

#### **2.2. QUALITY ASSURANCE PROJECT PLAN CRITERIA AND RELATED DISCUSSIONS**

##### **2.2.1 Project Background**

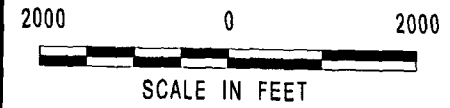
The sampling program developed for the Phase II RASAP is based on the adaptive sampling conceptual strategy presented in the RACWP, dated 23 May 1997. The actual sampling mechanism that will be utilized to achieve the intent of the adaptive sampling process is discussed in Part II, Section 2 of this addendum. Based on the discussion presented in the RACWP and in other project reports such as the *"Deterministic and Probabilistic Calculations to Estimate Risk-Based Cleanup Goals for Soils at Residences Near the 2800 South Sacramento Avenue Site, Chicago, Illinois,"* Alceon Corporation, October 25, 1996 (also referred to as the residential area risk assessment), it has been agreed that polynuclear aromatic hydrocarbons (PAHs) are the main contaminants of concern relative to assessing potential residential impact. As such, for this sampling event, PAHs



VICINITY MAP

SOURCE: 7.5 MINUTE QUADRANGLE MAP OF ENGLEWOOD, IL. DATED 1963, PHOTOREVISED 1972 & 1980.

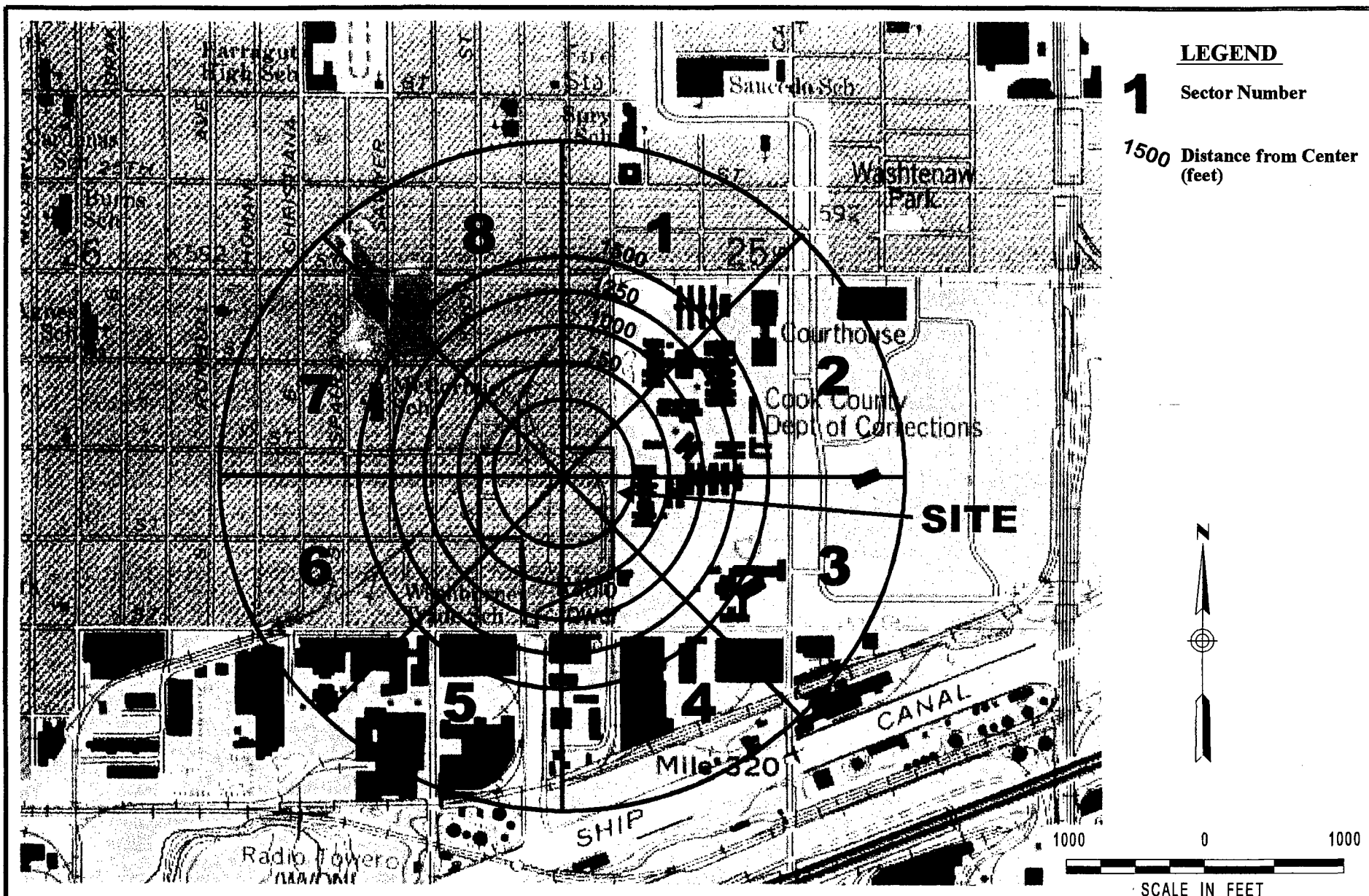
SITE PLAN



PARSONS ENGINEERING SCIENCE, INC.

SITE LOCATION MAP  
AlliedSignal, Inc./The Celotex Corporation

FIGURE 2.1



**PARSONS ENGINEERING SCIENCE, INC.**

# **SURROUNDING COMMUNITY SECTOR DELINEATION**

AlliedSignal, Inc./The Celotex Corporation

**FIGURE 2.2**



will be the only compounds for which the residential surface soils collected during this Phase II sampling event will be analyzed. The data generated from this sampling event will be used to determine whether PAH soil concentrations attributable to former Site operations exist within the residential community to a degree that requires remediation.

### **2.2.2 Residential Area Sampling and Analysis Program Schedule**

The schedule associated with the implementation of the RASAP is dependent on several factors:

1. The Respondents' ability to obtain consent from property owners and gain access to the necessary residential properties in a timely manner, for the purpose of sample collection.
2. Weather conditions.
3. Soil conditions associated with the depth of the frost line.
4. Holiday season limitations and related time-constraints.

It is anticipated that this Addendum No. 3 will be submitted to the USEPA for review and comment on or before 14 November 1997. Fourteen working days are assumed for USEPA review and comment, i.e., completion by 8 December 1997, and 10 working days are assumed for the Respondents to address the USEPA comments and finalize the document. Based on these timeframes, submittal of the finalized version of Addendum No. 3 to the USEPA Region V will occur on 22 December 1997. It is further assumed that approval to proceed with the RASAP will be received by the Respondents (from the USEPA Region V) within 7 working days thereafter, placing the plan approval date on 6 January 1998.

The Respondents will initiate the process of requesting access immediately after receiving USEPA Region V approval of Addendum No. 3. If all arrangements can be completed within 10 working days (by 20 January 1998), the Phase II RASAP will commence on 21 January 1998. It should be noted, however, that this sampling

commencement date is in the middle of the winter season. The collection of surface soil samples (using manually operated equipment) will not be possible if the ground surface is frozen. Schedule delays may result if this sampling program cannot be performed until after the ground surface has thawed, i.e., in Spring 1998. Refer to Part II, Section 2 of this addendum for discussion on the limitations associated with using hydraulically-operated sampling equipment such as direct-push drilling equipment, e.g., Geoprobe.

#### **2.2.3 Project Organization and Responsibilities**

The organizational structure and responsibilities of key management personnel presented in the Final SSP - Part 1, Section 3 (March 1997) also apply to the Phase II RASAP, with the exception of the Parsons ES QA/QC manager. The Parsons ES QA/QC manager for the Phase II RASAP will be Mr. William Borchardt, C.P.G. As stated previously, sample analyses will be performed by Quanterra, Inc.

#### **2.2.4 Quality Assurance Objectives for Measurement Data**

The quality assurance objectives discussed in the Final SSP - Part 1, Section 4 (March 1997) and related requirements agreed upon in Addendum No. 2 to the Final SSP QAPP (June 1997) that pertain to the collection of soil samples and to soil PAH analyses, also apply to the Phase II RASAP.

#### **2.2.5 Sampling Procedures**

The field sampling process and the requirements associated with the field sampling plan for the Phase II RASAP are discussed in Part II, Section 2 of this addendum.

#### **2.2.6 Custody Procedures**

The custody procedures discussed in the Final SSP - Part 1, Section 6 (March 1997) that pertain to the collection of soil samples and to soil PAH analyses, also apply to the Phase II RASAP.

### **2.2.7 Calibration Procedures and Frequency**

The calibration procedures and frequency discussed in the Final SSP - Part 1, Section 7 (March 1997) that pertain to the collection of soil samples and to soil PAH analyses, also apply to the Phase II RASAP.

### **2.2.8 Analytical Procedures**

The analytical procedures discussed in the Final SSP - Part 1, Section 8 (March 1997) and discussed in Addendum No. 2 to the Final SSP QAPP (June 1997), that pertain to the analyses of soil samples for PAHs also apply to the Phase II RASAP.

### **2.2.9 Internal Quality Control Checks**

The procedures and requirements discussed in the Final SSP - Part 1, Section 9 (March 1997) and in related requirements agreed upon in Addendum No. 2 to the Final SSP QAPP (June 1997) that pertain to the analyses of soil samples for PAHs also apply to the Phase II RASAP.

### **2.2.10 Data Reduction, Validation, and Reporting**

The procedures and requirements discussed in the Final SSP - Part 1, Section 10 (March 1997) and in related requirements agreed upon in Addendum No. 2 to the Final SSP QAPP (June 1997) that pertain to the analyses of soil samples for PAHs also apply to the Phase II RASAP. However, due to the iterative process associated with the adaptive sampling strategy, a modification has been made to the data assessment process to minimize delays during the sampling program. These modifications are as follows:

1. PAH analyses will be performed on a 10 to 14 calendar day turnaround basis from the date of laboratory receipt of the soil sample.
2. The only deliverable that will be provided by the laboratory at the end of the turnaround period will be the Final Form I Data forms containing the laboratory reviewed and approved PAH data. Neither backup data nor completed contract laboratory program (CLP) data packages will be provided by Quanterra at this stage.

3. The data on the Form I's will be used (unvalidated) to determine whether the adaptive sampling process should proceed into another sampling round.
4. Complete CLP data packages will be provided by Quanterra within 30 calendar days of the receipt of the last sample for each sample round.
5. Parsons ES will validate the data and perform data management activities when the complete CLP data packages are received from Quanterra.
6. If significant data issues are determined upon data validation that alter the decision(s) made in Item No. 3, corrective measures will be taken and additional sampling may be performed, if deemed necessary by all involved parties (AlliedSignal, The Celotex Corporation, the USEPA Region V, and Parsons ES).

#### **2.2.11 Performance and Systems Audits**

The procedures and requirements discussed in the Final SSP - Part 1, Section 11 (March 1997) and in related requirements agreed upon in Addendum No. 2 to the Final SSP QAPP (June 1997) that pertain to the analyses of soil samples for PAHs also apply to the Phase II RASAP. The performance of a field audit by the Parsons ES QA/QC manager will depend on the eventual duration of the RASAP. It is currently anticipated that the duration of each sampling round of the RASAP will be less than 7 working days, in which case a field audit would probably not be performed by the Parsons ES QA/QC manager.

#### **2.2.12 Preventative Maintenance**

The procedures and requirements discussed in the Final SSP - Part 1, Section 12 (March 1997) that pertain to the collection of soil samples and to soil PAH analyses, also apply to the Phase II RASAP.

#### **2.2.13 Specific Routine Procedures to Address Data Precision, Accuracy, and Completeness**

The procedures and requirements discussed in the Final SSP - Part 1, Section 13 (March 1997) also apply to the Phase II RASAP.

#### **2.2.14 Corrective Action**

The procedures and requirements discussed in the Final SSP - Part 1, Section 14 (March 1997) also apply to the Phase II RASAP.

#### **2.2.15 Quality Assurance Report to Management**

The procedures and requirements discussed in the Final SSP - Part 1, Section 15 (March 1997) also apply to the Phase II RASAP. At the culmination of the RASAP and after the data validation and management process has been completed, a summary Data Report presenting the findings of the Phase II RASAP will be prepared and submitted to the USEPA Region V for review.

# **FINAL SUPPORT SAMPLING PLAN**

## **ADDENDUM NO. 3**

### **PART II - FIELD SAMPLING PLAN**

#### **ASSOCIATED WITH PHASE II OF THE RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM**

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**PARSONS ENGINEERING SCIENCE, INC.  
1000 JORIE BOULEVARD, SUITE 250  
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## **PART II - SECTION 1 INTRODUCTION**

### **1.1 GENERAL**

This Addendum No. 3 to Part II of the Final Support Sampling Plan (SSP) represents the field sampling plan (FSP) for the Phase II Residential Area Sampling and Analysis Program (RASAP) associated with the 2800 South Sacramento Avenue site (the Site). It describes the activities that will be performed during the execution of the Phase II RASAP. Some of the field protocols that will be implemented during the Phase II RASAP are similar to those described in the Final SSP, Part II (FSP), March 1997. As such, this Addendum No. 3 to Part II of the SSP only discusses in detail those aspects of the field program that differ from that which was discussed in the original document.



## **PART II - SECTION 2**

### **FIELD SAMPLING PLAN DISCUSSION**

#### **2.1 SAMPLE NETWORK RATIONALE AND DESIGN**

The Phase II RASAP will entail the sampling of surface soils on residential properties situated within Sector 1 (northeast of the Site), and the analysis of these soil samples for polynuclear aromatic hydrocarbons (PAHs). The sampling approach is based on the adaptive sampling strategy discussed in Subsection 4.2 of the *Residential Area Conceptual Work Plan (RACWP)*, May 1997. The rationale behind the adaptive sampling approach is also discussed in detail in the RACWP and has not been repeated herein.

The adaptive sampling process for the Phase II RASAP will commence at the residential property that exhibited the highest benzo(a)pyrene equivalent (BaPeq) soil concentrations (based on data from previous residential soil sampling efforts). This property was identified in the RACWP, on Table 4.2, as ERM Map ID 212 (also referred to herein as the nucleus property). A BaPeq concentration of 61.040 parts per million (ppm) was detected in a surface soil sample taken from this property (at a depth of 0 to 3 inches) during a previous sampling event. This identification number indicates that this sample was taken from the residential property located at 2753 Whipple Avenue. This nucleus property is located on the east side of Whipple Avenue. It is bounded on the east and south by other residential properties, and on the north there is an open lot with a trailer. The Site is located to the west of the 2753 Whipple Avenue property (on the west side of Whipple Avenue).

To fulfill the requirements of the adaptive sampling strategy discussed in the RACWP, soil samples will be collected from the residential properties that are immediately adjacent to the property located at 2753 Whipple Avenue. Therefore, soil samples will be collected from the property to the east (located along Sacramento Avenue, between 2755 Sacramento Avenue and 2750 Sacramento Avenue), and from the property to the south (2755 Whipple

Avenue). The property to north (with the trailer) will also be sampled if it is determined that it is a residential lot.

As discussed in Section 4 of the RACWP, to address the statistical requirements for the data generated from this adaptive sampling program, eight soil samples will be collected from each property. The samples will be distributed between the front and back yard areas of each property (if both exist). Spatial correlation analysis discussed in the RACWP suggests that the ideal spacing for each sample location is approximately 125 feet. This distance will be used as a guide; however, access issues, property size and configuration, and other limitations such as the presence of asphalt driveways, etc., may prevent this spacing requirement from being strictly applied.

For the residential sampling program, PAHs have been deemed to be the main contaminants of concern potentially related to former Site operations. Only residential establishments are being assessed as part of the RASAP; therefore, within Sector 1, soil samples will not be collected from properties that are commercial or industrial establishments. All involved parties (USEPA, AlliedSignal, and The Celotex Corporation) have agreed that any potential impacts on the surrounding residential properties related to former Site operations would have resulted from airborne emissions/transport and subsequent surface deposition. As such, to assess PAH concentrations in surface soils that are potentially attributable to former Site operations, the following criteria/guidelines will be followed during sampling:

1. Surface soils located beneath asphalt surfaces will not be sampled because the PAH levels present in the soils below these surfaces may be impacted by constituent levels in the overlying asphalt material.
2. Surface soils that are overlain with concrete surfaces will be sampled. The concrete will first be cored through to gain access to the soils beneath.
3. Properties that are non-residential in use, i.e., properties that have been used or are being used as an industrial or commercial establishment, will not be sampled.

4. Surface soils that appear visually impacted by oils, grease, or other potentially hazardous substance(s) will not be sampled, since these substances may provide PAH contaminant indicators unrelated to former Site operations.
5. Due to the surface deposition mode of potential impact, the soil samples collected during this Phase II RASAP will be taken from soil material present at the surface down to a maximum depth of approximately 3 inches below ground surface (0 to 3 inches depth) to sample the surface deposited materials.
6. All soil samples will be collected as discrete grab samples, i.e., sample material from multiple discrete locations will not be composited into one sample, to enable a determination to be made on whether specific areas on specific properties are potentially more impacted than other areas. (Individual discrete grab soil sample material will be composited to facilitate sample homogeneity.)

Based on the approach outlined previously in this section, the initial round of sampling will entail the collection of a total of 32 investigative discrete surface soil samples (8 samples each from the nucleus property and from the three adjacent properties). Following the receipt of the sample results, the data will be statistically assessed as described in Section 4.2 of the RACWP.

If the BaPeq concentration in any of the samples taken from the properties adjacent to the nucleus property is higher than the 61.040 ppm BaPeq originally found on the nucleus property, a second round of adaptive sampling will be performed. The property with the highest BaPeq will become the new nucleus property for the new round of sampling, and the residential properties immediately adjacent to the new nucleus property (to the north, south, east, and west) will be sampled in a manner identical to that previously described for the first round of sampling.

If any of the properties adjacent to the new nucleus property were sampled during the first round, they will not be resampled during subsequent sampling rounds. If a commercial or industrial establishment is located adjacent to the nucleus property, this property will be skipped over and the residential property that is closest to the nucleus property (in the same direction) will be sampled.

The results from the second round of sampling will be evaluated in similar fashion to the data from the first sample round. If any of the samples from the adjacent properties exhibit a higher BaPeq concentration than the nucleus property, a third round of sampling will be conducted in a manner similar to the second sampling round. This iterative process will continue until the sample data from surrounding properties does not exhibit BaPeq concentrations that exceed the nucleus property, at which time the Phase II RASAP will cease.

## **2.2 FIELD ACTIVITIES - SAMPLING PROTOCOLS**

All samples collected during the Phase II RASAP will be soil samples collected from residential properties at the depth interval of 0 to 3 inches below ground surface. The use of hydraulically-operated sampling devices such as the Geoprobe will not facilitate the collection of accurate discrete soil samples from the shallow sample depth of 0 to 3 inches. Furthermore, access restrictions associated with gate entrances, yard configuration, and space for general vehicular maneuverability may prohibit the easy access of a Geoprobe pick-up truck, etc., on many properties. Parsons ES field sample personnel will utilize hand augers, steel tulip bulb planters with graduated markings, or other equivalent hand-held devices to collect discrete surface soil samples from the 0- to 3- inch depth. As such, this sampling event can only occur when the ground is not frozen.

Stainless-steel bowls, spoons and/or scoops will also be used during the Phase II RASAP. All reusable sampling equipment will be decontaminated prior to initial use and after the collection of each sample, in accordance with the requirements specified in Section 9 of the Final SSP, Part II (FSP), March 1996. The hand auger or tulip bulb planter will be driven into the ground to the required depth of 3 inches, and then removed. The sampler (with the soil material entrapped within) will be placed on a clean surface such as an unused piece of polyethylene sheeting, e.g., Visqueen. The soil sample material will be removed from the sampler and placed in a stainless-steel bowl. A small portion of this material will

be placed in a pint-size Ziploc bag. The Ziploc bag will be sealed immediately and set aside for headspace screening. If the soil sample material in the bowl is of sufficient volume to fill the required sample container(s), a stainless-steel spoon or scoop will be used to mix the sample. Large stones, roots, and other objects will be removed prior to mixing. If additional sample volume is needed, the sampler will be used to collect another sample volume from a location(s) immediately next to the first location.

When sufficient sample volume has been collected the mixing process will commence. Mixing will be performed in accordance with the requirements specified in Subsection 6.6 of the Final SSP, Part II (FSP), March 1996. After mixing is completed, the necessary sample containers will be filled. All sample material will be visually described by the Parsons ES field geologist. After the sample has been containerized and the sample material visually logged, the material in the Ziploc bag will be screened in accordance with the requirements specified in Subsection 6.7 of the Final SSP, Part II (FSP), March 1996. All screening results will be documented in the field logbook.

## **2.3 FIELD QUALITY CONTROL SAMPLE COLLECTION PROCEDURES**

The procedures and requirements discussed in the Final SSP - Part II (FSP), Subsection 6.5 (March 1997) that pertain to the collection of soil samples and to soil PAH analyses, also apply to the Phase II RASAP.

## **2.4 SAMPLE HOMOGENIZATION PROCEDURE**

The procedures and requirements discussed in the Final SSP - Part II (FSP), Subsection 6.6 (March 1997) that pertain to the collection of soil samples for PAH analyses, also apply to the Phase II RASAP.

## **2.5 PROCEDURE FOR SAMPLE HEADSPACE SCREENING**

The procedures and requirements discussed in the Final SSP - Part II (FSP), Subsection 6.7 (March 1997) pertaining to headspace screening also apply to the Phase II RASAP.

## **2.6 FIELD DOCUMENTATION AND SAMPLE CUSTODY PROCEDURES**

All sample locations will be photographed before sampling is performed, and after sample collection has been completed and the sample location has been repaired. Photographs will also be taken of sample collection activities. The procedures and requirements discussed in the Final SSP - Part II (FSP), Section 7 (March 1997) that pertain to documentation and sample custody, also apply to the Phase II RASAP, with the exception of the sample identification which has been modified as discussed below, to include residential soil samples:

- Project Code will be SSAS2, to represent the South Sacramento Avenue Site, Phase II investigation.
- Location Code will be RAP1, to represent residential area location 1. Each property that is sampled will have a new, unique, sequential numerical value assignment, i.e., 2, 3, etc.
- Sample type will consist of SS01, SS02, SS03, etc., representing the first, second, third, etc., soil sample collected from a specific residential property.
- The series code will be 0/3, representing the depth from which the soil samples are collected, i.e., 0 to 3 inches below ground surface.
- Field duplicate samples will have "90" added onto the numerical sample type code, e.g., SS01 (investigative sample) and SS91 (field duplicate sample).
- Matrix spike/matrix spike duplicate (MS/MSD) samples will have MMSD added to end of the series code, e.g., 0/3MMSD.

Examples of complete sample identifiers for the Phase II RASAP are shown below:

- SSAS2-RAP4-SS06-0/3: South Sacramento Avenue Site, Phase II investigation, residential area property No. 4, sixth soil sample collected from the 0- to 3-inch depth.
- SSAS2-RAP1-SS93-0/3: South Sacramento Avenue Site, Phase II investigation, residential area property No. 1, duplicate of the third soil sample collected from the 0- to 3-inch depth.
- SSAS2-RAP2-SS08-0/3MMSD: South Sacramento Avenue Site, Phase II investigation, residential area property No. 2, eighth soil sample collected from the

0- to 3-inch depth. MS/MSD analyses will be performed on this sample by the laboratory.

## **2.7 SAMPLE PRESERVATION, PACKING, AND SHIPPING**

The procedures and requirements discussed in the Final SSP - Part II (FSP), Section 8 (March 1997) that pertain to the collection of soil samples for PAH analyses, also apply to the Phase II RASAP.

## **2.8 DECONTAMINATION REQUIREMENTS**

The procedures and requirements discussed in the Final SSP - Part II (FSP), Section 9 (March 1997) that pertain to sampling equipment (Subsection 9.1.1) also apply to the Phase II RASAP. Since a drill rig will not be used for the Phase II RASAP, a steam cleaner will not be present during this sampling event.

## **2.9 MANAGEMENT OF INVESTIGATION-DERIVED WASTES**

The Phase II RASAP will generate a limited amount of investigative-derived wastes. These wastes will primarily consist of disposable latex gloves and liquid wastes generated from the decontamination of the sampling equipment. Field personnel will be attired in Level D personal protection attire; therefore, clothing such as Tyvek suits and disposable boot covers will not be worn by the field personnel. Latex and/or nitrile rubber gloves will be worn by Parsons ES field personnel during sampling to minimize sample cross-contamination. The soiled gloves will be placed in plastic garbage bags and disposed of as regular trash. Decontamination liquids will be stored in portable containers during each day's sampling event. At the end of the sampling day, the liquids will be poured into an on-site storage drum or equivalent container. Arrangements will be made to dispose of the liquid wastes after the residential sampling program is completed. All disturbed surface soil material will be replaced. Any concrete, asphalt, or sod surfaces that are disturbed during sampling will be mended with like material.